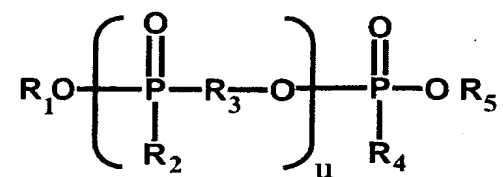


Patent claims:

1. A mixture composed of hydroxyalkyl phosphonates and chlorinated phosphoric esters.
2. The mixture as claimed in claim 1, which comprises from 30 to 70% by weight of hydroxyalkyl phosphonates and from 70 to 30% by weight of chlorinated phosphoric esters.
3. The mixture as claimed in claim 1 or 2, which comprises from 40 to 60% by weight of hydroxyalkyl phosphonates and from 60 to 40% by weight of chlorinated phosphoric esters.
4. The mixture as claimed in one or more of claims 1 to 3, which comprises from 45 to 55% by weight of hydroxyalkyl phosphonates and from 55 to 45% by weight of chlorinated phosphoric esters.
5. The mixture as claimed in one or more of claims 1 to 4, wherein the hydroxyalkyl phosphonates have the formula I

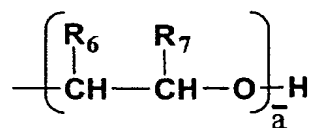


(I)

where

u denotes a chain length of from 0 to 10

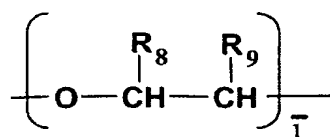
$R_1$  and  $R_5$  are identical or different, and are a hydroxy-containing radical of the formula II



(II)

$R_2$  and  $R_4$  are identical or different, and are an alkyl, aryl, or alkylaryl group having from 1 to 12 carbon atoms, and

$R_3$  is a radical of the formula III



(III)

$\bar{a}$  denotes an average chain length of from 0 to 4,

$\bar{1}$  denotes an average chain length of from 0 to 4, and

$R_6$ ,  $R_7$ ,  $R_8$ , and  $R_9$  are identical or different and, independently of one another, are H or an alkyl group having from 1 to 6 carbon atoms.

6. The mixture as claimed in one or more of claims 1 to 5, wherein  $u$  denotes a chain length of 0 or 1

$\bar{a}$  denotes an average chain length of from 1 to 2,

$\bar{1}$  denotes an average chain length of from 1 to 2, and

$R_2$  and  $R_4$  are identical or different and, independently of one another, are an alkyl group having from 1 to 5 carbon atoms, and

$R_6$ ,  $R_7$ ,  $R_8$ , and  $R_9$  are identical or different and, independently of one another, are H or an alkyl group having 1 or 2 carbon atoms.

7. The mixture as claimed in one or more of claims 1 to 6, wherein the hydroxyalkyl phosphonates comprise oxethylated methanephosphonic acid,

oxethylated ethanephosphonic acid, propoxylated methanephosphonic acid, propoxylated ethanephosphonic acid, oxethylated propanephosphonic acid, propoxylated propanephosphonic acid, diethylene glycol bis(hydroxyalkoxy) methanephosphonate, and/or ethylene glycol bis(hydroxyalkoxy) ethanephosphonate.

8. The mixture as claimed in one or more of claims 1 to 7, wherein the halogenated phosphoric esters comprise tris(2-chloroethyl) phosphate, tris(2-chloroisopropyl) phosphate, dichloro isopropyl phosphate, trisdichloroisopropyl phosphate, and/or tetrakis(2-chloroethyl) ethylenediphosphate.

9. A process for preparing flame-retardant flexible polyurethane foams with mixtures composed of hydroxyalkyl phosphonates and chlorinated phosphoric esters as claimed in one or more of claims 1 to 8, which comprises reacting organic polyisocyanates with compounds having at least two hydrogen atoms reactive toward isocyanates, with conventional blowing agents, stabilizers, activators, and/or other conventional auxiliaries and additives, in the presence of halogen-free hydroxyalkyl phosphonates of the formula I and chlorinated phosphoric esters.

10. A process for preparing flame-retardant flexible polyurethane foams with mixtures composed of hydroxyalkyl phosphonates and chlorinated phosphoric esters as claimed in one or more of claims 1 to 8, which comprises reacting organic polyisocyanates with compounds having at least two hydrogen atoms reactive toward isocyanates, with conventional blowing agents, stabilizers, activators, and/or other conventional auxiliaries and additives, in the presence of mixtures of halogen-free hydroxyalkyl phosphonates of the formula I and chlorinated phosphoric esters.

11. The process as claimed in claim 9 or 10, wherein mixtures composed of hydroxyalkyl phosphonates of the formula I and chlorinated phosphoric

esters are used in an amount of from 0.01 to 50 parts by weight, based on the resultant flexible polyurethane foam.

12. The process as claimed in one or more of claims 9 to 11, wherein mixtures composed of hydroxyalkyl phosphonates of the formula I and chlorinated phosphoric esters are used in an amount of from 0.5 to 20 parts by weight, based on the resultant flexible polyurethane foam.

13. The process as claimed in one or more of claims 9 to 12, wherein mixtures composed of hydroxyalkyl phosphonates of the formula I and chlorinated phosphoric esters are used in an amount of from 0.5 to 10 parts by weight, based on the resultant flexible polyurethane foam.

14. The process as claimed in one or more of claims 9 to 13, wherein the hydroxyalkyl phosphonates of the formula I comprise compounds liquid at processing temperature.

15. The process as claimed in one or more of claims 9 to 14, wherein the hydroxyalkyl phosphonates of the formula I comprise compounds reactive toward isocyanates.

16. The use of mixtures composed of hydroxyalkyl phosphonates of the formula I and chlorinated phosphoric esters, as flame retardants.

17. The use of mixtures of hydroxyalkyl phosphonates of the formula I and chlorinated phosphoric esters, as flame retardants for producing low-emission flame-retardant flexible polyurethane foams.

18. The use as claimed in claim 16 or 17, wherein the materials comprise from 30 to 70% by weight of hydroxyalkyl phosphonates and from 70 to 30% by weight of chlorinated phosphoric esters.

19. The use as claimed in claim 16 or 17, wherein the materials comprise

from 40 to 60% by weight of hydroxyalkyl phosphonates and  
from 60 to 40% by weight of chlorinated phosphoric esters.

20. The use as claimed in claim 16 or 17, wherein the materials comprise  
from 45 to 55% by weight of hydroxyalkyl phosphonates and  
from 55 to 45% by weight of chlorinated phosphoric esters.